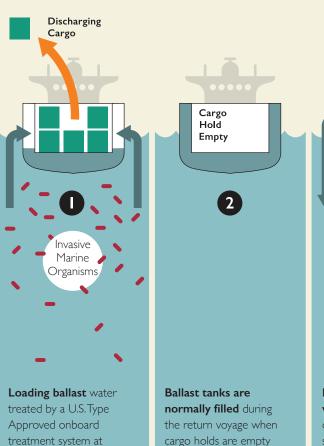
## **Vessel Ballasting Operations**

- Ballast water is added to or discharged from cargo vessels to maintain stability.
- U.S. DOT Volpe Center experts lend key support to the U.S. Coast Guard's Ballast Water Management Program.



a source port when

cargo is unloaded

cargo holds are empty

Discharging ballast water through the onboard treatment system at a destination port when cargo is loaded

Loading

Cargo

- · U.S. Type Approved onboard treatment systems are now available to prevent the spread of invasive marine organisms.
- The Volpe Center assisted in the development of the U.S. Coast Guard's Final Rule on discharge standards.
- Technical experts at the Volpe Center are validating the specifications of manufacturer's models to ensure treatment system performance will be effective on a large scale.

